

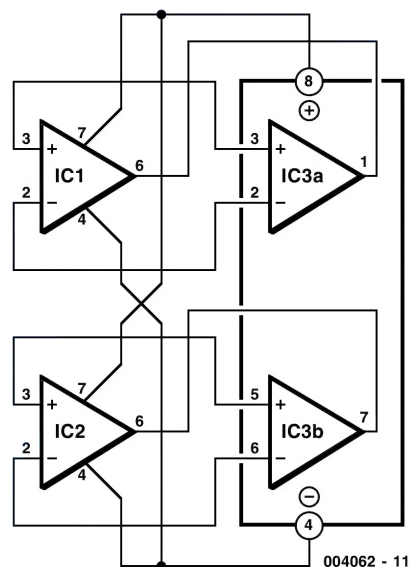
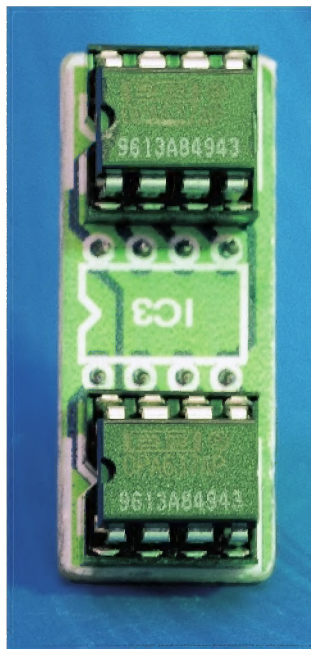
022

2 × single = 1 × dual

T. Giesberts

There are many more types of single opamps available than dual or quad versions. Not only can it sometimes be interesting to replace a dual opamp by two equivalent single opamps, it also allows the use of two completely different types of opamp, depending on the application. One example is the combination of the DAC and output filter of a CD player. A dual opamp is sometimes used here, although a fast linear amplifier is needed for the current-to-voltage converter, while a good low-noise opamp is more suitable for the output filter.

It's fairly easy to replace a dual opamp if you use one of the accompanying printed circuit boards. The schematic shows the connections between the two single opamps and the pin locations of the dual package. First solder eight short pieces of wire to the circuit board in the dual package location. After you have fitted the single opamps (with sockets if desired), solder these wires in place of the dual opamp. Pay careful attention to the orientation. Two layout versions are shown here. The larger one has better channel separation but takes up more space, while the other one is a lot more compact. With the larger board, the leads will probably have to be reasonably long, depending on the height of the surrounding components. This slightly increases the likelihood of interference. A third version is possible, using two small, separate printed circuit boards, with the ICs mounted back-to-back. In this case, however, the power supply leads would have to be connected between the two boards using wire bridges.



The PCB shown here is unfortunately not available ready-made through the Publishers' Readers Services.

(004062-1)

